



TORQ Analysis of Bindery Workers to Sewing Machine Operators




INPUT SECTION:

Transfer	Title	O*NET	Filters		
From Title:	Bindery Workers	51-5011.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Sewing Machine Operators	51-6031.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

OUTPUT SECTION:

Grand TORQ:













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Ability TORQ				Skills TORQ				Knowledge TORQ			
Level		72		Level		90		Level		90	
Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Visual Color Discrimination	46	25	56	No Skills Upgrade Required!				No Knowledge Upgrades Required!			
Rate Control	39	17	59								
Finger Dexterity	44	10	56								
Deductive Reasoning	35	8	50								
Visualization	39	8	50								
Arm-Hand Steadiness	51	6	65								
Near Vision	48	6	56								
Multilimb Coordination	37	6	53								
Problem Sensitivity	39	5	53								

LEVEL and IMPT (IMPORTANCE) refer to the Target Sewing Machine Operators. GAP refers to level difference between Bindery Workers and Sewing Machine Operators.

ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50

Description	Bindery Workers	Sewing Machine Operators	Importance
Arm-Hand Steadiness	45 	51 	65 
Manual Dexterity	44 	42 	62 
Control Precision	52 	42 	62 
Rate Control	22 	39 	59 



Information Ordering	41	37	56
Finger Dexterity	34	44	56
Near Vision	42	48	56
Visual Color Discrimination	21	46	56
Problem Sensitivity	34	39	53
Multilimb Coordination	31	37	53
Deductive Reasoning	27	35	50
Visualization	31	39	50
Skill Level Comparison - Abilities with importance scores over 69			
Description	Bindery Workers	Sewing Machine Operators	Importance
Knowledge Level Comparison - Knowledge with importance scores over 69			
Description	Bindery Workers	Sewing Machine Operators	Importance

Experience & Education Comparison						
Related Work Experience Comparison				Required Education Level Comparison		
Description	Bindery Workers		Sewing Machine Operators	Description	Bindery Workers	Sewing Machine Operators
10+ years		0%	0%	Doctoral	0%	0%
8-10 years		0%	0%	Professional Degree	0%	0%
6-8 years		0%	0%	Post-Masters Cert	0%	0%
4-6 years		2%	8%	Master's Degree	0%	0%
2-4 years		7%	13%	Post-Bachelor Cert	0%	0%
1-2 years		24%	9%	Bachelors	0%	2%
6-12 months		16%	11%	AA or Equiv	0%	0%
3-6 months		0%	0%	Some College	0%	8%
1-3 months		0%	5%	Post-Secondary Certificate	0%	2%
0-1 month		3%	0%	High School Diploma or GED	56%	12%
None		44%	51%	No HSD or GED	42%	73%
Bindery Workers				Sewing Machine Operators		
Most Common Educational/Training Requirement:						
Short-term on-the-job training			Moderate-term on-the-job training			
Job Zone Comparison						
2 - Job Zone Two: Some Preparation Needed			1 - Job Zone One: Little or No Preparation Needed			
Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a teller might benefit from experience working directly with the public, but an inexperienced person could still learn to be a teller with little difficulty.			No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a cashier even if he/she has never worked before.			
These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed.			These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license.			
Employees in these occupations need anywhere from a few months to one year of working with experienced employees.			Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.			



Tasks

Bindery Workers

Core Tasks

Generalized Work Activities:

- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.

Specific Tasks

Occupation Specific Tasks:

- Clean work areas, and maintain equipment and work stations, using hand tools.
- Crease or compress signatures before affixing covers; then place paper jackets on finished books.
- Examine stitched, collated, bound, and unbound product samples for defects such as imperfect bindings, ink spots, torn or loose pages, and loose and uncut threads.
- Feed books and related articles such as periodicals and pamphlets into binding machines, following specifications.
- Fill glue reservoirs, turn switches to activate heating elements, and adjust flow of glue and speed of conveyors.
- Fill machine paper feeds.
- Install and adjust bindery machine devices, such as knives, guides, rollers, rounding forms, creasing rams, and clamps, in order to accommodate sheets, signatures, or books of specified sizes, using hand tools.
- Lubricate and clean machine parts, and make minor repairs in order to keep machines in working condition.
- Maintain records of daily production, using specified forms.

Sewing Machine Operators

Core Tasks

Generalized Work Activities:

- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.

Specific Tasks

Occupation Specific Tasks:

- Attach buttons, hooks, zippers, fasteners, or other accessories to fabric, using feeding hoppers or clamp holders.
- Attach tape, trim, appliques, or elastic to specified garments or garment parts, according to item specifications.
- Baste edges of material to align and temporarily secure parts for final assembly.
- Cut excess material or thread from finished products.
- Cut materials according to specifications, using blades, scissors, or electric knives.
- Draw markings or pin appliques on fabric to obtain variations in design.
- Examine and measure finished articles to verify conformance to standards, using rulers.
- Fold or stretch edges or lengths of items while sewing, in order to facilitate forming specified sections.
- Guide garments or garment parts under machine needles and presser feet to sew parts together.
- Inspect garments, and examine repair tags and markings on garments to locate defects or damage, and mark errors as necessary.
- Match cloth pieces in correct sequences prior to sewing them, and verify that dye



- Mount and secure rolls or reels of wire, cloth, paper, or other material onto machine spindles.
- Move controls to adjust and activate bindery machines.
- Observe and monitor machine operations to detect malfunctions and to determine whether adjustments are needed.
- Open machines and remove and replace damaged covers and books, using hand tools.
- Punch holes in paper sheets, and fasten sheets, signatures, or other material, using hand or machine punches or staplers.
- Read work orders to determine setup specifications and instructions.
- Record production sheet information such as the amount of time spent on specific tasks.
- Remove broken wire pieces from machines, and load machines with new spools of wire.
- Remove printed material or finished products from machines or conveyors, wrap products in plastic, and stack them on pallets or skids or pack them in boxes.
- Secure reels of stitching wire on spindles, and thread wire through feeding, cutting, stitch forming, and driving mechanisms to load stitcher heads for stapling.
- Set machine controls to adjust lengths and thicknesses of folds, stitches, or cuts, to synchronize speed of feeding devices and stitching, and to adjust tension on creasing blades and folding rollers.
- Set up, or set up and operate, machines that perform binding operations such as pressing, folding, and trimming on books and related articles.
- Start machines and make trial runs to verify accuracy of machine setups.
- Stitch or glue endpapers, bindings, and signatures to attach them.
- Stock supplies such as signatures, books, or paper.
- Stop machines, cut threads that connect books, and stack separated books.
- Thread spirals in perforated holes of items to be bound, using spindles or rollers.
- Train workers to set up, operate, and use automatic bindery machines.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- apply adhesives, caulking, sealants, or coatings
- clean equipment or machinery

lots and patterns match.

- Monitor machine operation to detect problems such as defective stitching, breaks in thread, or machine malfunctions.
- Mount attachments, such as needles, cutting blades, or pattern plates, and adjust machine guides according to specifications.
- Perform equipment maintenance tasks such as replacing needles, sanding rough areas of needles, or cleaning and oiling sewing machines.
- Perform specialized or automatic sewing machine functions, such as buttonhole making or tacking.
- Place spools of thread, cord, or other materials on spindles, insert bobbins, and thread ends through machine guides and components.
- Position and mark patterns on materials to prepare for sewing.
- Position items under needles, using marks on machines, clamps, templates, or cloth as guides.
- Position material or articles in clamps, templates, or hoop frames prior to automatic operation of machines.
- Record quantities of materials processed.
- Remove holding devices and finished items from machines.
- Repair or alter items by adding replacement parts or missing stitches.
- Select supplies such as fasteners and thread, according to job requirements.
- Start and operate or tend machines, such as single or double needle serging and flat-bed felling machines, to automatically join, reinforce, or decorate material or articles.
- Tape or twist together thread or cord to repair breaks.
- Turn knobs, screws, and dials to adjust settings of machines, according to garment styles and equipment performance.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- clean equipment or machinery
- cut or trim fabric or leather
- examine products or work to verify conformance to specifications
- install equipment or attachments on machinery or related structures
- load or unload material or workpiece into machinery
- maintain consistent production quality
- maintain production or work records
- monitor production machinery/equipment



- clean rooms or work areas
- collate printed materials
- demonstrate or explain assembly or use of equipment
- examine products or work to verify conformance to specifications
- fabricate, assemble, or disassemble manufactured products by hand
- install equipment or attachments on machinery or related structures
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- maintain consistent production quality
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- monitor production machinery/equipment operation to detect problems
- move or fit heavy objects
- operate collating machine
- operate printing equipment/machinery
- package goods for shipment or storage
- perform safety inspections in manufacturing or industrial setting
- read work order, instructions, formulas, or processing charts
- set up production equipment or machinery
- use hand or power tools
- wrap products

- monitor production machinery/equipment operation to detect problems
- operate sewing machine
- perform safety inspections in manufacturing or industrial setting
- read work order, instructions, formulas, or processing charts
- repair tears or defects in fabrics, garments, or leather products
- sew by hand
- use hand or power tools
- use portable electric fabric cutter

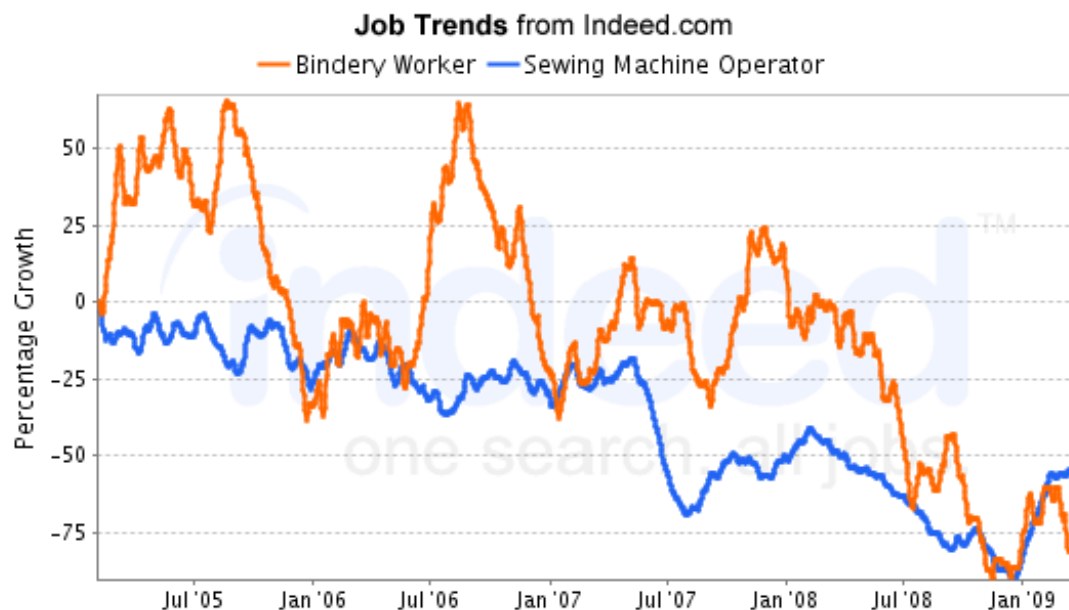
Labor Market Comparison

Description	Bindery Workers	Sewing Machine Operators	Difference
Median Wage	\$ 26,130	\$ 22,440	\$(3,690)
10th Percentile Wage	\$ 17,110	\$ 16,350	\$(760)
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 31,490	\$ 27,200	\$(4,290)
90th Percentile Wage	\$ 36,420	\$ 31,710	\$(4,710)
Mean Wage	\$ 26,320	\$ 23,030	\$(3,290)
Total Employment - 2007	350	1,080	730
Employment Base - 2006	366	1,077	711
Projected Employment - 2016	293	990	697
Projected Job Growth - 2006-2016	-19.9 %	-8.1 %	11.9 %
Projected Annual Openings - 2006-2016	5	10	5



National Job Posting Trends

Trend for Bindery Workers

Trend for
Sewing
Machine
OperatorsData from [Indeed](http://Indeed.com)

Recommended Programs

No program data for the occupation.

Maine Statewide Promotion Opportunities for Bindery Workers

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings
51-5011.00	Bindery Workers	100	2	350	\$26,130.00	\$0.00	-20%	5
51-4122.00	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	88	2	120	\$36,960.00	\$10,830.00	2%	3
51-4031.00	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	88	2	450	\$27,500.00	\$1,370.00	-14%	11
51-5023.00	Printing Machine Operators	87	2	790	\$29,710.00	\$3,580.00	-3%	18



51-4193.00	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	87	2	120	\$32,160.00	\$6,030.00	16%	5
45-4022.00	Logging Equipment Operators	81	1	1,390	\$29,280.00	\$3,150.00	4%	46
51-9191.00	Cementing and Gluing Machine Operators and Tenders	81	1	80	\$27,620.00	\$1,490.00	-15%	2
51-9032.00	Cutting and Slicing Machine Setters, Operators, and Tenders	81	2	710	\$31,350.00	\$5,220.00	-23%	12
51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	81	2	910	\$38,230.00	\$12,100.00	-26%	23
51-9041.00	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	80	2	260	\$28,330.00	\$2,200.00	-7%	5
51-2031.00	Engine and Other Machine Assemblers	79	3	20	\$29,010.00	\$2,880.00	-45%	1
51-4034.00	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	79	3	110	\$34,350.00	\$8,220.00	-9%	2
51-9195.07	Molding and Casting Workers	79	2	0	\$26,980.00	\$850.00	7%	20
51-4121.06	Welders, Cutters, and Welder Fitters	79	2	1,610	\$38,030.00	\$11,900.00	7%	49
51-9051.00	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	79	2	300	\$32,980.00	\$6,850.00	-18%	9

Top Industries for Sewing Machine Operators

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Cut and sew apparel manufacturing	315200	37.46%	87,218	36,829	-57.77%
Other textile product mills	314900	8.50%	19,797	17,782	-10.18%
Textile furnishings mills	314100	7.91%	18,422	16,690	-9.40%



Self-employed workers, primary job	000601	7.29%	16,967	18,076	6.54%
Household and institutional furniture manufacturing	337120	6.35%	14,794	12,383	-16.30%
Apparel accessories and other apparel manufacturing	315900	2.75%	6,400	4,026	-37.09%
Apparel knitting mills	315100	2.14%	4,987	2,805	-43.75%
Medical equipment and supplies manufacturing	339100	2.01%	4,674	4,781	2.29%
Other furniture related product manufacturing	337900	1.88%	4,384	4,577	4.40%
Printing and related support activities	323100	1.73%	4,029	3,192	-20.77%
Motor vehicle parts manufacturing	336300	1.48%	3,443	2,741	-20.39%
Fabric mills	313200	1.36%	3,162	2,233	-29.38%
Drycleaning and laundry services	812300	1.35%	3,133	3,133	0.01%
Clothing stores	448100	1.31%	3,053	2,973	-2.63%
Footwear manufacturing	316200	0.92%	2,134	1,000	-53.16%

Top Industries for Bindery Workers

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Printing and related support activities	323100	75.67%	49,078	34,998	-28.69%
Employment services	561300	4.66%	3,020	3,822	26.56%
Converted paper product manufacturing	322200	2.30%	1,489	1,125	-24.47%
Advertising and related services	541800	1.69%	1,095	1,112	1.55%
Newspaper publishers	511110	1.53%	993	765	-22.90%
Self-employed workers, primary job	000601	1.32%	853	818	-4.12%
Specialized design services	541400	0.81%	528	636	20.43%
Colleges, universities, and professional schools, public and private	611300	0.42%	271	273	0.69%
Federal government, excluding postal service	919999	0.36%	234	199	-14.92%
Paper and paper product merchant wholesalers	424100	0.33%	214	206	-3.85%
Other support services	561900	0.29%	189	233	23.30%
Management of companies and enterprises	551100	0.17%	109	113	3.75%
State government, excluding education and hospitals	929200	0.15%	100	88	-11.68%
Elementary and secondary schools, public and private	611100	0.11%	71	68	-5.16%
Industrial machinery manufacturing	333200	0.11%	70	52	-26.26%